



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,279	02/12/2004	Sung Uk Moon	248778US8	3506

22850 7590 04/19/2007
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

SOBUTKA, PHILIP

ART UNIT	PAPER NUMBER
----------	--------------

2618

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	04/19/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 04/19/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary	Application No.	Applicant(s)	
	10/776,279	MOON ET AL.	
	Examiner	Art Unit	
	Philip J. Sobutka	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>8/16/2006; 1/17/2006</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Sarkkinen et al (US 2001/0046877).

Consider claim 1. Sarkkinen teaches a radio communication system in which the same information is transmitted from a radio station to a plurality of mobile stations with a predetermined down link transmission power (*Sarkkinen see for example figures 3-5, paragraphs 33-35,37*), wherein the radio station comprises:

a transmission power controller configured to control the predetermined down link transmission power based on control information transmitted by a part of the mobile stations subordinated to the radio station (*Sarkkinen see for example figures 3-5, paragraphs 33-35,37*).

Art Unit: 2618

Consider claim 2. Shinzo teaches a radio communication system in which the same information is transmitted from a radio station to a plurality of mobile stations with a predetermined down link transmission power (*Sarkkinen see for example figures 3-5, paragraphs 33-35,37*), wherein

the radio station comprises:

a transmission power controller configured to control the predetermined down link transmission power based on control information transmitted by the mobile stations (*Sarkkinen see for example figures 3-5, paragraphs 33-35,37*), and

the mobile station comprises:

a decision unit configured to decide whether to transmit the control information to the radio station (*Sarkkinen see for example figures 3-5, paragraphs 33-35,37*); and

a transmitter configured to transmit the control information to the radio station based on a result of the decision made by the decision unit, the control information being generated according to reception quality of the same information transmitted by the radio station (*Sarkkinen see for example figures 3-5, paragraphs 33-35,37*).

Consider claim 3. Sarkkinen teaches a radio communication system in which the same information is transmitted from a radio station to a plurality of mobile stations with a predetermined down link transmission power, wherein

the radio station comprises:

a threshold-setting unit configured to set a threshold for reception quality
(*Sarkkinen sends the threshold from the base in the SIB system signaling broadcast see for example figures 3-5, paragraphs 33-35,37*);

a transmitter configured to transmit the threshold for the reception quality set by the threshold setting unit and the same information to the mobile stations (*Sarkkinen see for example figures 3-5, paragraphs 33-35,37*); and

a transmission power controller configured to control the predetermined down link transmission power based on control information transmitted by the mobile stations (*Sarkkinen see for example figures 3-5, paragraphs 33-35,37*), and

the mobile station comprises:

a reception quality calculator configured to calculate the reception quality of the same information transmitted by the radio station (*Sarkkinen see for example figures 3-5, paragraphs 33-35,37*);

a decision unit configured to decide whether to transmit the control information to the radio station by comparing the reception quality calculated by the reception quality calculator with the threshold for the reception quality transmitted by the radio station (*Sarkkinen sends the threshold from the base in the SIB system signaling broadcast see for example figures 3-5, paragraphs 33-35,37*); and

a transmitter configured to transmit the control information to the radio station based on a result of the decision made by the decision unit (*Sarkkinen see for example figures 3-5, paragraphs 33-35,37*).

Consider claim 4. Sarkkinen teaches a radio communication system in which the same information is transmitted from a radio station to a plurality of mobile stations with a predetermined down link transmission power (*Sarkkinen see for example figures 3-5, paragraphs 33-35,37*), wherein

the radio station comprises:

a mobile station selector configured to select a mobile station to which a transmission request for control information is transmitted (*Sarkkinen teaches a multicast system which restricts transmissions to selected units see for example paragraphs 6*);

a transmission request transmitter configured to transmit the transmission request to the mobile station selected by the mobile station selector (*Sarkkinen teaches a multicast system which restricts transmissions to selected units see for example paragraphs 6*); and

a transmission power controller configured to control the predetermined down link transmission power based on the control information transmitted by the mobile station that has been selected by the mobile station selector (*Sarkkinen sends the threshold from the base in the SIB system signaling broadcast see for example figures 3-5, paragraphs 33-35,37*), and

the mobile station comprises:

a transmitter configured to transmit the control information to the radio station based on the transmission request transmitted by the radio station (*Sarkkinen sends the*

Art Unit: 2618

threshold from the base in the SIB system signaling broadcast see for example figures 3-5, paragraphs 33-35,37).

Consider claim 5. Sarkkinen teaches a transmission power control method for controlling a predetermined down link transmission power when transmitting the same information from a radio station to a plurality of mobile stations with the predetermined down link transmission power (*Sarkkinen see for example figures 3-5, paragraphs 33-35,37*), the method comprising the steps of:

deciding whether to transmit control information from the mobile station to the radio station (*Sarkkinen only sends control when indicated see for example figures 3-5, paragraphs 33-35,37*);

transmitting the control information from the mobile station to the radio station based on a result of the decision, the control information generated according to reception quality of the same information transmitted from the radio station (*Sarkkinen see for example figures 3-5, paragraphs 33-35,37*); and

controlling the predetermined down link transmission power in the radio station based on the control information transmitted from the mobile stations (*Sarkkinen see for example figures 3-5, paragraphs 33-35,37*).

Consider claim 6. Sarkkinen teaches a transmission power control method for controlling a predetermined down link transmission power when transmitting the same information from a radio station to a plurality of mobile stations with the predetermined

Art Unit: 2618

down link transmission power (*Sarkkinen see for example figures 3-5, paragraphs 33-35,37*), the method comprising the steps of:

setting a threshold for reception quality in the radio station; transmitting the set threshold for the reception quality and the same information from the radio station to the mobile stations (*Sarkkinen see for example figures 3-5, paragraphs 33-35,37*);

calculating the reception quality of the same information transmitted from the radio station in the mobile station (*Sarkkinen sends the threshold from the base in the SIB system signaling broadcast see for example figures 3-5, paragraphs 33-35,37*);

deciding whether to transmit control information to the radio station in the mobile station by comparing the calculated reception quality of the same information with the threshold for the reception quality transmitted from the radio station (*Sarkkinen only sends control when indicated see for example figures 3-5, paragraphs 33-35,37*);

transmitting the control information from the mobile station to the radio station based on a result of the decision (*Sarkkinen see for example figures 3-5, paragraphs 33-35,37*); and

controlling the predetermined down link transmission power in the radio station based on the control information transmitted from the mobile stations (*Sarkkinen see for example figures 3-5, paragraphs 33-35,37*).

Consider claim 7. Sarkkinen teaches a transmission power control method for controlling a predetermined down link transmission power when transmitting the same information from a radio station to a plurality of mobile stations with the predetermined

Art Unit: 2618

down link transmission power (*Sarkkinen see for example figures 3-5, paragraphs 33-35,37*), the method comprising the steps of:

selecting a mobile station to which a control information transmission request is transmitted in the radio station (*Sarkkinen teaches a multicast system which restricts transmissions to selected units see for example paragraphs 6*);

transmitting the transmission request from the radio station to the selected mobile station (*Sarkkinen sends the threshold from the base in the SIB system signaling broadcast see for example figures 3-5, paragraphs 33-35,37*);

transmitting the control information from the mobile station to the radio station based on the transmission request transmitted from the radio station (*Sarkkinen sends the threshold from the base in the SIB system signaling broadcast see for example figures 3-5, paragraphs 33-35,37*); and

controlling the predetermined down link transmission power in the radio station based on the control information transmitted from the mobile station (*Sarkkinen sends the threshold from the base in the SIB system signaling broadcast see for example figures 3-5, paragraphs 33-35,37*).

Consider claim 8. Sarkkinen teaches a mobile station for receiving the same information transmitted from a radio station with a predetermined down link transmission power, the mobile station comprising:

a decision unit configured to decide whether to transmit control information to the radio station (*Sarkkinen only sends control when indicated see for example figures 3-5, paragraphs 33-35,37*);

a reception quality calculator configured to calculate reception quality of the same information transmitted by the radio station, based on a result of the decision made by the decision unit (*Sarkkinen sends the threshold from the base in the SIB system signaling broadcast see for example figures 3-5, paragraphs 33-35,37*); and

a transmitter configured to transmit the control information generated based on the reception quality calculated by the reception quality calculator to the radio station (*Sarkkinen see for example figures 3-5, paragraphs 33-35,37*).

Consider claim 9. Sarkkinen teaches a mobile station for receiving the same information transmitted from a radio station with a predetermined down link transmission power, the mobile station comprising:

a reception quality calculator configured to calculate reception quality of the same information transmitted by the radio station (*Sarkkinen sends the threshold from the base in the SIB system signaling broadcast see for example figures 3-5, paragraphs 33-35,37*);

a decision unit configured to decide whether to transmit the control information to the radio station by comparing the reception quality calculated by the reception quality calculator with a threshold for the reception quality transmitted by the radio station

Art Unit: 2618

(Sarkkinen only sends control when indicated see for example figures 3-5, paragraphs 33-35,37); and

a transmitter configured to transmit the control information to the radio station based on a result of the decision made by the decision unit *(Sarkkinen see for example figures 3-5, paragraphs 33-35,37).*

Consider claim 10. Sarkkinen teaches a radio station for transmitting the same information to a plurality of mobile stations with a predetermined down link transmission power, the radio station comprising:

a mobile station selector configured to select a mobile station to which a transmission request for control information is transmitted *(Sarkkinen teaches a multicast system which restricts transmissions to selected units see for example paragraphs 6); and*

a transmission power controller configured to control the predetermined down link transmission power based on the control information transmitted by the mobile station that has been selected by the mobile station selector *(Sarkkinen sends the threshold from the base in the SIB system signaling broadcast see for example figures 3-5, paragraphs 33-35,37).*

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip J Sobutka whose telephone number is 571-272-7887. The examiner can normally be reached Monday through Friday from 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on 571-272-4711.

5. The central fax phone number for the Office is 571-273-8300.

Most facsimile-transmitted patent application related correspondence is required to be sent to the Central FAX Number.

CENTRALIZED DELIVERY POLICY: For patent related correspondence, hand carry deliveries must be made to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314), and facsimile transmissions must be sent to the Central FAX number, unless an exception applies. For example, if the examiner has rejected claims in a regular U.S. patent application, and the reply to the examiner's Office action is desired to be transmitted by facsimile rather than mailed, the reply must be sent to the Central FAX Number.

6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/776,279

Page 12

Art Unit: 2618


PHILIP J. SOBUTKA
PATENT EXAMINER 4/15/02

Philip J Sobutka

(571) 272-7887